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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/637,206	OROFINO, DONALD P.
	Examiner	Art Unit	
	Kandasamy Thangavelu	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 January 2007</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-17,19-34,36-51,53-70 and 72-92</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17,19-34,36-51,53-70 and 72-92</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>29 January 2007</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This communication is in response to the Applicant's Response mailed on January 29, 2007. Claims 1, 19, 36, 53 and 72-76 were amended. Claims 18, 35, 52, 71 and 93 were canceled. Claims 1-17, 19-34, 36-51, 53-70 and 72-92 of the application are pending. This office action is made non-final.

Drawings

2.   The correction to drawing 4C submitted on January 29, 2007 is accepted.

Specification

3.   The corrections to the specification submitted on January 29, 2007 are accepted.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. §112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5.   Claims 1, 19, 36, 53 and 72-76 are rejected under 35 U.S.C. 112, first paragraph, as

containing subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention.

6.   Claims 1, 19, 36, 53 and 72-76 refer to "a control system separate from the dynamic

system model, the control system having two or more data modules" and "synchronizing data

collection by the two or more data collection modules using the control system". One of

ordinary skill in the art knows that a control system is used to automatically control one or more

variables in a system. In order to do that, the control system receives measured values of the

parameters to be controlled from the plant being controlled, and has reference values of the

parameters which are preset or calculated by the control system. Then the errors between the

reference values and the actual values are computed. The errors are used to compute the

correction signals that are sent to the plant. The correction signals are used by the plant to adjust

its operation so the measured values of the parameters being controlled reach the reference

values within prespecified tolerances. The Examiner takes the position that the applicants have

not described such a control system anywhere in the specification. What they have described is a

data acquisition system having two or more data modules, the two or more data modules being

communicatively coupled to receive data from the dynamic system model and synchronizing

data collection by the two or more data collection modules using the data acquisition system.

Claim Rejections - 35 USC § 112

7.   In claims 1, 19, 36, 53 and 72-76 all references to a control system have been interpreted as references to a data acquisition system.

Claim Rejections - 35 USC § 112

8.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9.   Claim 5, 22 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5, Line 2 recites the limitation "while the dynamic system continues to operate ". There is insufficient antecedent basis for this limitation in the claim. Claim 1 refers to "a dynamic system model".

Claim 22, Line 2 recites the limitation "while the dynamic system continues to operate ". There is insufficient antecedent basis for this limitation in the claim. Claim 19 refers to "a dynamic system model".

Claim 36, Line 6 recites " the dynamic system ". There is insufficient antecedent basis for this limitation in the claim. Claim 36, Line 2 refers to "a dynamic system model".

Claim Rejections - 35 USC § 101

10.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11.   Claims 76-92 are rejected under 35 U.S.C. 101 because the claimed inventions are directed to non-statutory subject matter.

11.1   Claim 76 refer to "medium for use in a simulation environment on an electronic device, the medium holding instructions executable using the electronic device for performing a method of controlling collection of data generated by a dynamic system model". Any medium holding instructions executable using the electronic device is not patentable under 35 USC 101 unless the medium is limited to a computer readable storage or recording medium.

Claim Rejections - 35 USC § 102

12.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

 (e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

13.   Claims 1, 5-8, 14-17, 36, 40-42, 48-51, 53, 57-60, 66-70, 72, 74-76, 79-83 and 89-92 are rejected under 35 U.S.C. § 102 (a) and 102(e) as being anticipated by **Eryilmaz et al.** (U.S. Patent Application 2003/0122826).

13.1   **Eryilmaz et al.** teaches Adaptive lookup table: A graphical simulation component for recursively updating numeric data stored in table form. Specifically, as per claim 1, **Eryilmaz et al.** teaches in a simulation environment, a method for controlling collection of data generated by a dynamic system model (Fig. 1, Items 28 and 46; Page 1, Para 0005, L1-3; Page 1, Para 0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3, Para 0037, L3-10; Page 4, Para 0047, L1-15), comprising:

        providing the dynamic system model (Page 1, Para 0002; Page 4, Para 0047, L1-15);

        providing a control system separate from the dynamic system model, the control system having two or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para 0037, L3-10), the two or more data modules being communicatively coupled to receive data from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

        activating the dynamic system model, thereby generating data (Fig. 1, Items 16; Page 4, Para 0046, L2-7; Page 4, Para 0047, L1-15); and

        synchronizing data collection by the two or more data modules using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para 0012).

Per claim 5: **Eryilmaz et al.** teaches executing a suspend function to pause collection of data while the dynamic system continues to operate (Page 3, Para 0040, L5-7).

Per claim 6: **Eryilmaz et al.** teaches providing an interface having a communication port for communicating with each of the two or more data modules (Fig. 1, Items 28 and 40; Page 3, Para 0039, L1-8; Page 4, Para 0044, L13-16).

Per claim 7: **Eryilmaz et al.** teaches directing a review of data collected by the two or more data collection instruments by utilizing a review function (Page 4, Para 0041, L5-7).

Per claim 8: **Eryilmaz et al.** teaches a user defining data history parameters utilizing a data history function (Page 2, Para 0017; Fig. 3; Page 2, Para 0029, L6-12; Pages 2 and 3, Para 0030; Page 3, Para 0040, L5-7; Page 4, Para 0043, L6-8; Page 4, Para 0043, L14-22).

Per claim 14: **Eryilmaz et al.** teaches utilizing an event based trigger to initiate a data module action (Fig. 2, Item 75; Page 3, Para 0040, L5-7).

Per claim 15: **Eryilmaz et al.** teaches that the simulation environment comprises at least one of a graphical, textual, data flow, time based, and event based environments (Page 2, Para 0026, L1-7; Page 2, Para 0025, L1-4).

Per claim 16: **Eryilmaz et al.** teaches that the two or more data modules are virtually formed using at least one of MATLAB, JAVA, C++, object-oriented code, and computer code (Page 1, Para 0013, L4-8; Page 2, Para 0026, L8-16; Page 2, Para 0028, L1-6; Page 3, Para 0031, L1-5).

Per claim 17: **Eryilmaz et al.** teaches that the two or more data modules provide displays in the form of at least one of textual, graphical, multi -dimensional, oscilloscope, and spectrum analyzer (Page 3, Para 0031, L1-5; Page 1, Para 0002, L3-6; Page 1, Para 0009, L3-7; Page 1, Para 0012; Page 2, Para 0026, L3-15; Page 3 Para 0037, L3-10; Page 3 Para 0038).

13.2   As per claim 36, **Eryilmaz et al.** teaches in a simulation environment, a method for controlling collection of data generated by a dynamic system model (Fig. 1, Items 28 and 46; Page 1, Para 0005, L1-3; Page 1, Para 0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3, Para 0037, L3-10; Page 4, Para 0047, L1-15), comprising:

providing the dynamic system model (Page 1, Para 0002; Page 4, Para 0047, L1-15);

providing a control system separate from the dynamic system model, the control system having two or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para 0037, L3-10), the two or more data modules being communicatively coupled to receive data from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

activating the dynamic system model, thereby generating data (Fig. 1, Items 16; Page 4, Para 0046, L2-7; Page 4, Para 0047, L1-15);

synchronizing data collection by the two or more data modules using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para 0012); and

executing a suspend function to pause collection of data while the dynamic system continues to operate (Page 3, Para 0040, L5-7).

Per claim 40: **Eryilmaz et al.** teaches providing an interface having a communication

port for communicating with each of the two or more data modules (Fig. 1, Items 28 and 40;

Page 3, Para 0039, L1-8; Page 4, Para 0044, L13-16).

Per claim 41: **Eryilmaz et al.** teaches directing a review of data collected by the two or

more data collection instruments by utilizing a review function (Page 4, Para 0041, L5-7).

Per claim 42: **Eryilmaz et al.** teaches a user defining data history parameters utilizing a

data history function (Page 2, Para 0017; Fig. 3; Page 2, Para 0029, L6-12; Pages 2 and 3, Para

0030; Page 3, Para 0040, L5-7; Page 4, Para 0043, L6-8; Page 4, Para 0043, L14-22).

Per claim 48: **Eryilmaz et al.** teaches utilizing an event based trigger to initiate a data

module action (Fig. 2, Item 75; Page 3, Para 0040, L5-7).

Per claim 49: **Eryilmaz et al.** teaches that the simulation environment comprises at least

one of a graphical, textual, data flow, time based, and event based environments (Page 2, Para

0026, L1-7; Page 2, Para 0025, L1-4).

Per claim 50: **Eryilmaz et al.** teaches that the two or more data modules are virtually

formed using at least one of MATLAB, JAVA, C++, object-oriented code, and computer code

(Page 1, Para 0013, L4-8; Page 2, Para 0026, L8-16; Page 2, Para 0028, L1-6; Page 3, Para 0031,

L1-5).

Per claim 51: **Eryilmaz et al.** teaches that the two or more data modules provide displays

in the form of at least one of textual, graphical, multi -dimensional, oscilloscope, and spectrum

analyzer (Page 3, Para 0031, L1-5; Page 1, Para 0002, L3-6; Page 1, Para 0009, L3-7; Page 1,

Para 0012; Page 2, Para 0026, L3-15; Page 3 Para 0037, L3-10; Page 3 Para 0038).

13.3   As per claim 53, **Eryilmaz et al.** teaches a method for controlling collection of data

generated by a dynamic system (Fig. 1, Items 28 and 46; Page 1, Para 0005, L1-3; Page 1, Para

0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3, Para 0037, L3-10; Page 4, Para 0047,

L1-15; Page 2, Para 0023; Page 4, Para 0045, L1-7), comprising:

   providing the dynamic system (Page 1, Para 0002; Page 4, Para 0047, L1-15);

   providing a control system separate from the dynamic system, the control system having

two or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para

0037, L3-10), the two or more data modules being communicatively coupled to receive data

from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

   activating the dynamic system, thereby generating data (Fig. 1, Items 16; Page 4, Para

0046, L2-7; Page 4, Para 0047, L1-15); and

   synchronizing data collection by the two or more data modules using the control system

(Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para 0012).

   Per claim 57: **Eryilmaz et al.** teaches executing a suspend function to pause collection of

data while the dynamic system continues to operate (Page 3, Para 0040, L5-7).

   Per claim 58: **Eryilmaz et al.** teaches providing an interface having a communication

port for communicating with each of the two or more data modules (Fig. 1, Items 28 and 40;

Page 3, Para 0039, L1-8; Page 4, Para 0044, L13-16).

Per claim 59: **Eryilmaz et al.** teaches directing a review of data collected by the two or more data collection instruments by utilizing a review function (Page 4, Para 0041, L5-7).

Per claim 60: **Eryilmaz et al.** teaches a user defining data history parameters utilizing a data history function (Page 2, Para 0017; Fig. 3; Page 2, Para 0029, L6-12; Pages 2 and 3, Para 0030; Page 3, Para 0040, L5-7; Page 4, Para 0043, L6-8; Page 4, Para 0043, L14-22).

Per claim 66: **Eryilmaz et al.** teaches utilizing an event based trigger to initiate a data module action (Fig. 2, Item 75; Page 3, Para 0040, L5-7).

Per claim 67: **Eryilmaz et al.** teaches that the simulation environment comprises at least one of a graphical, textual, data flow, time based, and event based environments (Page 2, Para 0026, L1-7; Page 2, Para 0025, L1-4).

Per claim 68: **Eryilmaz et al.** teaches that the two or more data modules are virtually formed using at least one of MATLAB, JAVA, C++, object-oriented code, and computer code (Page 1, Para 0013, L4-8; Page 2, Para 0026, L8-16; Page 2, Para 0028, L1-6; Page 3, Para 0031, L1-5).

Per claim 69: **Eryilmaz et al.** teaches that the two or more data modules provide displays in the form of at least one of textual, graphical, multi -dimensional, oscilloscope, and spectrum analyzer (Page 3, Para 0031, L1-5; Page 1, Para 0002, L3-6; Page 1, Para 0009, L3-7; Page 1, Para 0012; Page 2, Para 0026, L3-15; Page 3 Para 0037, L3-10; Page 3 Para 0038).

Per claim 70: **Eryilmaz et al.** teaches that the dynamic system is at least one of a virtual

system and a physical system (Fig. 1, Items 28 and 46; Page 1, Para 0005, L1-3; Page 1, Para

0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3, Para 0037, L3-10; Page 4, Para 0047,

L1-15; Page 2, Para 0023; Page 4, Para 0045, L1-7).

13.4   As per claim 72, **Eryilmaz et al.** teaches in a simulation environment, a system for

controlling collection of data generated by a dynamic system model (Fig. 1, Items 28 and 46;

Page 1, Para 0005, L1-3; Page 1, Para 0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3,

Para 0037, L3-10; Page 4, Para 0047, L1-15), comprising:

the dynamic system model provided in a simulation application and configured to

generate the data (Page 1, Para 0002; Page 4, Para 0047, L1-15);

a control system separate from the dynamic system model, the control system having two

or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para

0037, L3-10), the two or more data modules being communicatively coupled to receive data

from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

wherein the data collection by the two or more data collection modules is synchronized

using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para

0012).

13.5   As per claim 74, **Eryilmaz et al.** teaches in a simulation environment, a system for

controlling collection of data generated by a dynamic system model (Fig. 1, Items 28 and 46;

Page 1, Para 0005, L1-3; Page 1, Para 0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3,

Para 0037, L3-10; Page 4, Para 0047, L1-15), comprising:

the dynamic system model provided in a simulation application and configured to ·

generate the data (Page 1, Para 0002; Page 4, Para 0047, L1-15);

a control system separate from the dynamic system model, the control system having two

or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para

0037, L3-10), the two or more data modules being communicatively coupled to receive data

from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

wherein the data collection by the two or more data collection modules is synchronized

using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para

0012); and

wherein a suspend function is provided to pause collection of data while the dynamic

system continues to operate (Page 3, Para 0040, L5-7).

13.6   As per claim 75, **Eryilmaz et al.** teaches a system for controlling collection of data

generated by a dynamic system (Fig. 1, Items 28 and 46; Page 1, Para 0005, L1-3; Page 1, Para

0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3, Para 0037, L3-10; Page 4, Para 0047,

L1-15), comprising:

the dynamic system provided in a simulation application and configured to generate the

data (Page 1, Para 0002; Page 4, Para 0047, L1-15);

a control system separate from the dynamic system, the control system having two or

more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para 0037,

L3-10), the two or more data modules being communicatively coupled to receive data from the dynamic system (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

wherein the data collection by the two or more data collection modules is synchronized using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para 0012).

13.7   As per claims 76, 80-83 and 89-92, these are rejected based on the same reasoning as claims 1, 5-8 and 14-17, supra. Claims 76, 80-83 and 89-92 are computer medium claims reciting the same limitations as claims 1, 5-8 and 14-17supra, as taught throughout by **Eryilmaz et al.**

Per claim 79: **Eryilmaz et al.** teaches a user manipulating the display of data collected while data continues to be collected (Page 2, Para 0026, L3-11; Page 2, Para 0029, L1-12).

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

15.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

16.   Claims 2-4, 19-25, 31-34, 37-39, 54-56, 73 and 77-78 are rejected under 35 U.S.C. 103(a)

as being unpatentable over **Eryilmaz et al.** (U.S. Patent Application 2003/0122826) in view of

Guiberson et al. (U.S. Patent 6,088,029).

16.1   As per claim 2, **Eryilmaz et al.** teaches the method of claim 1. **Eryilmaz et al.** does not

expressly teach executing a snapshot function to direct at least one of the two or more data

modules to freeze a display of data collected while the dynamic system model continues to

execute and the data continues to be collected. **Guiberson et al.** teaches executing a snapshot

function to direct at least one of the two or more data modules to freeze a display of data

collected while the dynamic system model continues to execute and the data continues to be

collected (Fig. 4, Item 410; CL1, L22-29; CL4, L58-60). It would have been obvious to one of

ordinary skill in the art at the time of Applicant's invention to modify the method of **Eryilmaz et**

al. with the method of **Guiberson et al.** that included executing a snapshot function to direct at

least one of the two or more data modules to freeze a display of data collected while the dynamic

system model continues to execute and the data continues to be collected, because that would

allow adjusting the parameters that control acquisition of data (CL1, L36-38).

16.2   As per claim 3, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 2.

Eryilmaz et al. teaches a user reviewing the display of data collected while data continues to be

collected (Page 4, Para 0041, L5-7). **Eryilmaz et al.** does not expressly a user reviewing the

display of data collected while data continues to be collected without updating the display.

Guiberson et al. teaches a user reviewing the display of data collected while data continues to

be collected without updating the display (Fig. 4, Item 410 and 415; CL1, L22-29; CL4, L58-60).

Per claim 4: **Eryilmaz et al.** teaches a user manipulating the display of data collected

while data continues to be collected (Page 2, Para 0026, L3-11; Page 2, Para 0029, L1-12).

16.3   As per claim 19, **Eryilmaz et al.** teaches in a simulation environment, a method for

controlling collection of data generated by a dynamic system model (Fig. 1, Items 28 and 46;

Page 1, Para 0005, L1-3; Page 1, Para 0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3,

Para 0037, L3-10; Page 4, Para 0047, L1-15), comprising:

providing the dynamic system model (Page 1, Para 0002; Page 4, Para 0047, L1-15);

providing a control system separate from the dynamic system model, the control system

having two or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page

3, Para 0037, L3-10), the two or more data modules being communicatively coupled to receive

data from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

activating the dynamic system model, thereby generating data (Fig. 1, Items 16; Page 4, Para 0046, L2-7; Page 4, Para 0047, L1-15); and

synchronizing data collection by the two or more data modules using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para 0012).

Eryilmaz et al. does not expressly teach executing a snapshot function to direct at least one of the two or more data modules to freeze a display of data collected while the dynamic system model continues to execute and the data continues to be collected. **Guiberson et al.** teaches executing a snapshot function to direct at least one of the two or more data modules to freeze a display of data collected while the dynamic system model continues to execute and the data continues to be collected (Fig. 4, Item 410; CL1, L22-29; CL4, L58-60).

16.4   As per claim 20, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 19. **Eryilmaz et al.** teaches a user reviewing the display of data collected while data continues to be collected (Page 4, Para 0041, L5-7). **Eryilmaz et al.** does not expressly a user reviewing the display of data collected while data continues to be collected without updating the display. **Guiberson et al.** teaches a user reviewing the display of data collected while data continues to be collected without updating the display (Fig. 4, Item 410 and 415; CL1, L22-29; CL4, L58-60).

Per claim 21: **Eryilmaz et al.** teaches a user manipulating the display of data collected while data continues to be collected (Page 2, Para 0026, L3-11; Page 2, Para 0029, L1-12).

Per claim 22: **Eryilmaz et al.** teaches executing a suspend function to pause collection of data while the dynamic system continues to operate (Page 3, Para 0040, L5-7).

Per claim 23: **Eryilmaz et al.** teaches providing an interface having a communication port for communicating with each of the two or more data modules (Fig. 1, Items 28 and 40; Page 3, Para 0039, L1-8; Page 4, Para 0044, L13-16).

Per claim 24: **Eryilmaz et al.** teaches directing a review of data collected by the two or more data collection instruments by utilizing a review function (Page 4, Para 0041, L5-7).

Per claim 25: **Eryilmaz et al.** teaches a user defining data history parameters utilizing a data history function (Page 2, Para 0017; Fig. 3; Page 2, Para 0029, L6-12; Pages 2 and 3, Para 0030; Page 3, Para 0040, L5-7; Page 4, Para 0043, L6-8; Page 4, Para 0043, L14-22).

Per claim 31: **Eryilmaz et al.** teaches utilizing an event based trigger to initiate a data module action (Fig. 2, Item 75; Page 3, Para 0040, L5-7).

Per claim 32: **Eryilmaz et al.** teaches that the simulation environment comprises at least one of a graphical, textual, data flow, time based, and event based environments (Page 2, Para 0026, L1-7; Page 2, Para 0025, L1-4).

Per claim 33: **Eryilmaz et al.** teaches that the two or more data modules are virtually formed using at least one of MATLAB, JAVA, C++, object-oriented code, and computer code (Page 1, Para 0013, L4-8; Page 2, Para 0026, L8-16; Page 2, Para 0028, L1-6; Page 3, Para 0031, L1-5).

Per claim 34: **Eryilmaz et al.** teaches that the two or more data modules provide displays in the form of at least one of textual, graphical, multi -dimensional, oscilloscope, and spectrum analyzer (Page 3, Para 0031, L1-5; Page 1, Para 0002, L3-6; Page 1, Para 0009, L3-7; Page 1, Para 0012; Page 2, Para 0026, L3-15; Page 3 Para 0037, L3-10; Page 3 Para 0038).

16.5   As per claim 37, **Eryilmaz et al.** teaches the method of claim 36. **Eryilmaz et al.** does not expressly teach executing a snapshot function to direct at least one of the two or more data modules to freeze a display of data collected while the dynamic system model continues to execute and the data continues to be collected. **Guiberson et al.** teaches executing a snapshot function to direct at least one of the two or more data modules to freeze a display of data collected while the dynamic system model continues to execute and the data continues to be collected (Fig. 4, Item 410; CL1, L22-29; CL4, L58-60).

16.6   As per claim 38, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 37. **Eryilmaz et al.** teaches a user reviewing the display of data collected while data continues to be collected (Page 4, Para 0041, L5-7). **Eryilmaz et al.** does not expressly a user reviewing the display of data collected while data continues to be collected without updating the display. **Guiberson et al.** teaches a user reviewing the display of data collected while data continues to be collected without updating the display (Fig. 4, Item 410 and 415; CL1, L22-29; CL4, L58-60).

Per claim 39: **Eryilmaz et al.** teaches a user manipulating the display of data collected while data continues to be collected (Page 2, Para 0026, L3-11; Page 2, Para 0029, L1-12).

16.7   As per claim 54, **Eryilmaz et al.** teaches the method of claim 53. **Eryilmaz et al.** does

not expressly teach executing a snapshot function to direct at least one of the two or more data

modules to freeze a display of data collected while the dynamic system model continues to

execute and the data continues to be collected. **Guiberson et al.** teaches executing a snapshot

function to direct at least one of the two or more data modules to freeze a display of data

collected while the dynamic system model continues to execute and the data continues to be

collected (Fig. 4, Item 410; CL1, L22-29; CL4, L58-60).

16.8   As per claim 55, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 54.

Eryilmaz et al. teaches a user reviewing the display of data collected while data continues to be

collected (Page 4, Para 0041, L5-7). **Eryilmaz et al.** does not expressly a user reviewing the

display of data collected while data continues to be collected without updating the display.

Guiberson et al. teaches a user reviewing the display of data collected while data continues to

be collected without updating the display (Fig. 4, Item 410 and 415; CL1, L22-29; CL4, L58-60).

Per claim 56: **Eryilmaz et al.** teaches a user manipulating the display of data collected

while data continues to be collected (Page 2, Para 0026, L3-11; Page 2, Para 0029, L1-12).

16.9   As per claim 73, **Eryilmaz et al.** teaches in a simulation environment, a system for

controlling collection of data generated by a dynamic system model (Fig. 1, Items 28 and 46;

Page 1, Para 0005, L1-3; Page 1, Para 0012; Page 1, Para 0015; Page 2, Para 0023, L6-9; Page 3,

Para 0037, L3-10; Page 4, Para 0047, L1-15), comprising:

the dynamic system model provided in a simulation application and configured to

generate the data (Page 1, Para 0002; Page 4, Para 0047, L1-15);

a control system separate from the dynamic system model, the control system having two

or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para

0037, L3-10), the two or more data modules being communicatively coupled to receive data

from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7);

wherein the data collection by the two or more data collection modules is synchronized

using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para

0012).

Eryilmaz et al. does not expressly teach that a snapshot function is provided that directs

at least one of the two or more data modules to freeze a display of data collected while the model

dynamic system continues to execute and the data continues to be collected. **Guiberson et al.**

teaches that a snapshot function is provided that directs at least one of the two or more data

modules to freeze a display of data collected while the model dynamic system continues to

execute and the data continues to be collected (Fig. 4, Item 410; CL1, L22-29; CL4, L58-60).

16.10   As per claims 77 and 78, these are rejected based on the same reasoning as claims 2 and

3, supra. Claims 77 and 78 are computer medium claims reciting the same limitations as claims

2 and 3 supra, as taught throughout by **Eryilmaz et al.** and **Guiberson et al.**

17.   Claims 9, 43, 61 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eryilmaz et al. (U.S. Patent Application 2003/0122826) in view of **Chen et al.** (U.S. Patent

5,684,945), and further in view of **Mikurak** (U.S. Patent 7,130,807).

17.1   As per claim 9, **Eryilmaz et al.** teaches the method of claim 8.   **Eryilmaz et al.** does not

expressly teach the data history parameters comprise at least one of amount of data history,

amount of memory allocation for storing data history, types of data collected, signal attributes.

Chen et al. teaches the data history parameters comprise at least one of amount of data history,

amount of memory allocation for storing data history, types of data collected, signal attributes

(CL23, L31-34). It would have been obvious to one of ordinary skill in the art at the time of

Applicant's invention to modify the method of **Eryilmaz et al.** with the method of **Chen et al.**

that included the data history parameters comprising at least one of amount of data history,

amount of memory allocation for storing data history, types of data collected, signal attributes,

because that would allow actual values of data parameters to be kept according to the history

property (CL23, L37-39).

         Eryilmaz et al. and **Chen et al.** do not expressly teach that the data history parameters

comprise at least one of data formats. **Mikurak** teaches that the data history parameters comprise

at least one of data formats (CL29, L52-57). It would have been obvious to one of ordinary skill

in the art at the time of Applicant's invention to modify the method of **Eryilmaz et al.** and **Chen**

et al. with the method of **Mikurak** that included that the data history parameters comprising at

least one of data formats, because that would allow data to be presented in the form that could be recognized and manipulated (CL23, L37-39).

17.2   As per claim 43, **Eryilmaz et al.** teaches the method of claim 42. **Eryilmaz et al.** does not expressly teach the data history parameters comprise at least one of amount of data history, amount of memory allocation for storing data history, types of data collected, signal attributes. **Chen et al.** teaches the data history parameters comprise at least one of amount of data history, amount of memory allocation for storing data history, types of data collected, signal attributes (CL23, L31-34).

   Eryilmaz et al. and **Chen et al.** do not expressly teach that the data history parameters comprise at least one of data formats. **Mikurak** teaches that the data history parameters comprise at least one of data formats (CL29, L52-57).

17.3   As per claim 61, **Eryilmaz et al.** teaches the method of claim 60. **Eryilmaz et al.** does not expressly teach the data history parameters comprise at least one of amount of data history, amount of memory allocation for storing data history, types of data collected, signal attributes. **Chen et al.** teaches the data history parameters comprise at least one of amount of data history, amount of memory allocation for storing data history, types of data collected, signal attributes (CL23, L31-34).

   Eryilmaz et al. and **Chen et al.** do not expressly teach that the data history parameters comprise at least one of data formats. **Mikurak** teaches that the data history parameters comprise at least one of data formats (CL29, L52-57).

17.4   As per claim 84, it is rejected based on the same reasoning as claim 9, supra. Claim 84 is

a computer medium claim reciting the same limitations as claim 9 supra, as taught throughout

by **Eryilmaz et al., Chen et al.** and **Mikurak.**

18.   Claims 10, 44, 62 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eryilmaz et al. (U.S. Patent Application 2003/0122826) in view of **Herbrich et al.** (U.S. Patent

Application 2004/0266526).

18.1   As per claim 10, **Eryilmaz et al.** teaches the method of claim 1. **Eryilmaz et al.** does

not expressly teach directing a buffering mode to be utilized during data collection from one of a

circular buffering mode, a finite buffering mode, and a buffer extension mode by executing a

data buffering mode function. **Herbrich et al.** teaches directing a buffering mode to be utilized

during data collection from one of a circular buffering mode, a finite buffering mode, and a

buffer extension mode by executing a data buffering mode function (Fig. 3; Page 3, Para 0041,

L1-6 and L9-15; Page 3, Para 0042, L1-2; Fig. 5; Pages 3 and 4, Para 0046; Page 4, Para 0047,

L1-2). It would have been obvious to one of ordinary skill in the art at the time of Applicant's

invention to modify the method of **Eryilmaz et al.** with the method of **Herbrich et al.** that

included directing a buffering mode to be utilized during data collection from one of a circular

buffering mode, a finite buffering mode, and a buffer extension mode by executing a data

buffering mode function, because that would allow a previously stored control value to be

extracted from a location in the buffer indicated by the next buffer (Pages 3 and 4, Para 0046,

L3-6).

18.2   As per claim 44, **Eryilmaz et al.** teaches the method of claim 36. **Eryilmaz et al.** does

not expressly teach directing a buffering mode to be utilized during data collection from one of a

circular buffering mode, a finite buffering mode, and a buffer extension mode by executing a

data buffering mode function. **Herbrich et al.** teaches directing a buffering mode to be utilized

during data collection from one of a circular buffering mode, a finite buffering mode, and a

buffer extension mode by executing a data buffering mode function (Fig. 3; Page 3, Para 0041,

L1-6 and L9-15; Page 3, Para 0042, L1-2; Fig. 5; Pages 3 and 4, Para 0046; Page 4, Para 0047,

L1-2).

18.3   As per claim 62, **Eryilmaz et al.** teaches the method of claim 53. **Eryilmaz et al.** does

not expressly teach directing a buffering mode to be utilized during data collection from one of a

circular buffering mode, a finite buffering mode, and a buffer extension mode by executing a

data buffering mode function. **Herbrich et al.** teaches directing a buffering mode to be utilized

during data collection from one of a circular buffering mode, a finite buffering mode, and a

buffer extension mode by executing a data buffering mode function (Fig. 3; Page 3, Para 0041,

L1-6 and L9-15; Page 3, Para 0042, L1-2; Fig. 5; Pages 3 and 4, Para 0046; Page 4, Para 0047,

L1-2).

18.4   As per claim 85, it is rejected based on the same reasoning as claim 10, supra. Claim 85

is a computer medium claim reciting the same limitations as claim 10 supra, as taught throughout

by **Eryilmaz et al.** and **Herbrich et al.**

19.   Claims 11, 45, 63 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eryilmaz et al. (U.S. Patent Application 2003/0122826) in view of **Chen et al.** (U.S. Patent

5,684,945).

19.1   As per claim 11, **Eryilmaz et al.** teaches the method of claim 1. **Eryilmaz et al.** does

not expressly teach a user utilizing a scroll function to scroll through previously collected data

while the dynamic system model is operating. **Chen et al.** teaches a user utilizing a scroll

function to scroll through previously collected data while the dynamic system model is operating

(CL23, L40-46).

19.2   As per claim 45, **Eryilmaz et al.** teaches the method of claim 36. **Eryilmaz et al.** does

not expressly teach a user utilizing a scroll function to scroll through previously collected data

while the dynamic system model is operating. **Chen et al.** teaches a user utilizing a scroll

function to scroll through previously collected data while the dynamic system model is operating

(CL23, L40-46).

19.3   As per claim 63, **Eryilmaz et al.** teaches the method of claim 53. **Eryilmaz et al.** does

not expressly teach a user utilizing a scroll function to scroll through previously collected data

while the dynamic system model is operating. **Chen et al.** teaches a user utilizing a scroll

function to scroll through previously collected data while the dynamic system model is operating

(CL23, L40-46).

19.4   As per claim 86, it is rejected based on the same reasoning as claim 11, supra. Claim 86

is a computer medium claim reciting the same limitations as claim 11 supra, as taught throughout

by **Eryilmaz et al.** and **Chen et al.**

20.   Claims 12, 46, 64 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eryilmaz et al. (U.S. Patent Application 2003/0122826) in view of **Coburn et al.** (U.S. Patent

Application 2004/0128120).

20.1   As per claim 12, **Eryilmaz et al.** teaches the method of claim 1. **Eryilmaz et al.** does

not expressly teach providing a time tracking function that directs a graphical display indication

of a time history of data collected. **Coburn et al.** teaches providing a time tracking function that

directs a graphical display indication of a time history of data collected (Page 4, Para 0052, L7-

11). It would have been obvious to one of ordinary skill in the art at the time of Applicant's

invention to modify the method of **Eryilmaz et al.** with the method of **Coburn et al.** that

included providing a time tracking function that directs a graphical display indication of a time

history of data collected, because that would allow a movie illustrating a mechanical assembly

line of a manufacturing facility to be shown in three dimensions in the virtual world to illustrate

the system operation (Page 4, Para 0052, L1-4).

20.2   As per claim 46, **Eryilmaz et al.** teaches the method of claim 36. **Eryilmaz et al.** does

not expressly teach providing a time tracking function that directs a graphical display indication

of a time history of data collected. **Coburn et al.** teaches providing a time tracking function that

directs a graphical display indication of a time history of data collected (Page 4, Para 0052, L7-

11).

20.3   As per claim 64, **Eryilmaz et al.** teaches the method of claim 53. **Eryilmaz et al.** does

not expressly teach providing a time tracking function that directs a graphical display indication

of a time history of data collected. **Coburn et al.** teaches providing a time tracking function that

directs a graphical display indication of a time history of data collected (Page 4, Para 0052, L7-

11).

20.4   As per claim 87, it is rejected based on the same reasoning as claim 12, supra. Claim 87

is a computer medium claim reciting the same limitations as claim 12 supra, as taught throughout

by **Eryilmaz et al.** and **Coburn et al.**

21.   Claims 13, 47, 65 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eryilmaz et al. (U.S. Patent Application 2003/0122826) in view of **Mikurak** (U.S. Patent

7,130,807).

21.1   As per claim 13, **Eryilmaz et al.** teaches the method of claim 1. **Eryilmaz et al.** teaches

synchronizing the two or more data modules comprises conveying to the selected of the two or

more data modules a direction to synchronize execution of one or more functions at the selected

of the two or more data modules (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1,

Para 0012).

       Eryilmaz et al. does not expressly teach that synchronizing the two or more data

modules comprises conveying to the selected of the two or more data modules a direction to

synchronize execution of one or more functions at the selected of the two or more data modules

by utilizing a broadcasting function. **Mikurak** teaches that synchronizing the two or more data

modules comprises conveying to the selected of the two or more data modules a direction to

synchronize execution of one or more functions at the selected of the two or more data modules

by utilizing a broadcasting function (CL137, L10-12).

21.2   As per claim 47, **Eryilmaz et al.** teaches the method of claim 36. **Eryilmaz et al.**

teaches synchronizing the two or more data modules comprises conveying to the selected of the

two or more data modules a direction to synchronize execution of one or more functions at the

selected of the two or more data modules (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3;

Page 1, Para 0012).

       Eryilmaz et al. does not expressly teach that synchronizing the two or more data

modules comprises conveying to the selected of the two or more data modules a direction to

synchronize execution of one or more functions at the selected of the two or more data modules

by utilizing a broadcasting function. **Mikurak** teaches that synchronizing the two or more data

modules comprises conveying to the selected of the two or more data modules a direction to

synchronize execution of one or more functions at the selected of the two or more data modules

by utilizing a broadcasting function (CL137, L10-12).

21.3   As per claim 65, **Eryilmaz et al.** teaches the method of claim 53. **Eryilmaz et al.**

teaches synchronizing the two or more data modules comprises conveying to the selected of the

two or more data modules a direction to synchronize execution of one or more functions at the

selected of the two or more data modules (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3;

Page 1, Para 0012).

       Eryilmaz et al. does not expressly teach that synchronizing the two or more data

modules comprises conveying to the selected of the two or more data modules a direction to

synchronize execution of one or more functions at the selected of the two or more data modules

by utilizing a broadcasting function. **Mikurak** teaches that synchronizing the two or more data

modules comprises conveying to the selected of the two or more data modules a direction to

synchronize execution of one or more functions at the selected of the two or more data modules

by utilizing a broadcasting function (CL137, L10-12).

21.4   As per claim 88, it is rejected based on the same reasoning as claim 13, supra. Claim 88

is a computer medium claim reciting the same limitations as claim 13 supra, as taught throughout

by **Eryilmaz et al.** and **Mikurak.**

22.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Eryilmaz et al.**

(U.S. Patent Application 2003/0122826) in view of **Guiberson et al.** (U.S. Patent 6,088,029),

and further in view of **Chen et al.** (U.S. Patent 5,684,945), and further in view of **Mikurak** (U.S.

Patent 7,130,807).

22.1   As per claim 26, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 25.

Eryilmaz et al. and **Guiberson et al.** do not expressly teach the data history parameters

comprise at least one of amount of data history, amount of memory allocation for storing data

history, types of data collected, signal attributes. **Chen et al.** teaches the data history parameters

comprise at least one of amount of data history, amount of memory allocation for storing data

history, types of data collected, signal attributes (CL23, L31-34).

      Eryilmaz et al., Guiberson et al. and **Chen et al.** do not expressly teach that the data

history parameters comprise at least one of data formats. **Mikurak** teaches that the data history

parameters comprise at least one of data formats (CL29, L52-57).

23.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Eryilmaz et al.**

(U.S. Patent Application 2003/0122826) in view of **Guiberson et al.** (U.S. Patent 6,088,029),

and further in view of **Herbrich et al.** (U.S. Patent Application 2004/0266526).

23.1   As per claim 27, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 19.

Eryilmaz et al. and **Guiberson et al.** do not expressly teach directing a buffering mode to be

utilized during data collection from one of a circular buffering mode, a finite buffering mode,

and a buffer extension mode by executing a data buffering mode function. **Herbrich et al.**

teaches directing a buffering mode to be utilized during data collection from one of a circular

buffering mode, a finite buffering mode, and a buffer extension mode by executing a data

buffering mode function (Fig. 3; Page 3, Para 0041, L1-6 and L9-15; Page 3, Para 0042, L1-2;

Fig. 5; Pages 3 and 4, Para 0046; Page 4, Para 0047, L1-2).

24.   Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Eryilmaz et al.**

(U.S. Patent Application 2003/0122826) in view of **Guiberson et al.** (U.S. Patent 6,088,029),

and further in view of **Chen et al.** (U.S. Patent 5,684,945).

24.1   As per claim 28, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 19.

Eryilmaz et al. and **Guiberson et al.** do not expressly teach a user utilizing a scroll function to

scroll through previously collected data while the dynamic system model is operating. **Chen et**

al. teaches a user utilizing a scroll function to scroll through previously collected data while the

dynamic system model is operating (CL23, L40-46).

25.   Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Eryilmaz et al.**

(U.S. Patent Application 2003/0122826) in view of **Guiberson et al.** (U.S. Patent 6,088,029),

and further in view of **Coburn et al.** (U.S. Patent Application 2004/0128120).

25.1   As per claim 29, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 19.

Eryilmaz et al. and **Guiberson et al.** do not expressly teach providing a time tracking function

that directs a graphical display indication of a time history of data collected. **Coburn et al.**

teaches providing a time tracking function that directs a graphical display indication of a time

history of data collected (Page 4, Para 0052, L7-11).

26.   Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Eryilmaz et al.**

. (U.S. Patent Application 2003/0122826) in view of **Guiberson et al.** (U.S. Patent 6,088,029),

and further in view of **Mikurak** (U.S. Patent 7,130,807).

26.1   As per claim 30, **Eryilmaz et al.** and **Guiberson et al.** teach the method of claim 19.

Eryilmaz et al. teaches synchronizing the two or more data modules comprises conveying to the

selected of the two or more data modules a direction to synchronize execution of one or more

functions at the selected of the two or more data modules (Fig. 1, Items 22, 28 and 40; Page 1,

Para 0005, L1-3; Page 1, Para 0012).

      Eryilmaz et al. and **Guiberson et al.** do not expressly teach that synchronizing the two

or more data modules comprises conveying to the selected of the two or more data modules a

direction to synchronize execution of one or more functions at the selected of the two or more

data modules by utilizing a broadcasting function. **Mikurak** teaches that synchronizing the two

or more data modules comprises conveying to the selected of the two or more data modules a

direction to synchronize execution of one or more functions at the selected of the two or more

data modules by utilizing a broadcasting function (CL137, L10-12).

Response to Arguments

27.   Applicant's arguments with respect to 35 USC 102 (e) and 103 (a) rejections are moot in view of the claim amendments made by the applicant. New claim rejection under 35 USC 112 First Paragraph, 112 second Paragraph, 35 USC 101 are presented in this office action. New art rejections are presented in response to the applicant's amendment to the claims.

27.1   As per the applicant's argument that "Bishop does not disclose providing a control system separate from the dynamic system model, the control system having two or more data modules; Bishop does not disclose synchronizing data collection by the two or more data modules using the control system; Bishop does not disclose the required data modules that are part of a separate control system or synchronization of the data collection performed by the data modules using a separate control system; Guiberson does not disclose the required data modules that are part of a separate control system or synchronization of the data collection performed by the data modules using a separate control system; Mathworks does not teach the required data modules that are part of a separate control system or synchronization of the data collection performed by the data modules using a separate control system; Cohen does not teach the required data modules that are part of a separate control system or synchronization of the data collection performed by the data modules using a separate control system; the combination of Bishop and Guiberson in view of Cohen does not teach the required data modules that are part of a separate control system or synchronization of the data collection performed by the data modules using a separate control system; the combination of Bishop and Guiberson in view of

Mathworks does not teach the required data modules that are part of a separate control system or synchronization of the data collection performed by the data modules using a separate control system", the Examiner takes the position that the control system described by the applicant is actually a data collection system. Such a data collection system is taught by **Eryilmaz et al.**

Eryilmaz et al. teaches providing a control system separate from the dynamic system model, the control system having two or more data modules (Fig. 1, Items 18, 22, 28 and 40; Page 2, Para 0024, L1-5; Page 3, Para 0037, L3-10), the two or more data modules being communicatively coupled to receive data from the dynamic system model (Fig. 1, Items 22, 28 and 40; Page 3, Para 0037, L3-7); and

synchronizing data collection by the two or more data modules using the control system (Fig. 1, Items 22, 28 and 40; Page 1, Para 0005, L1-3; Page 1, Para 0012).

Conclusion

28.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

K. Thangavelu
Art Unit 2123
May 22, 2007